SUMMIT COUNTY GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS INCLUDED ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE SPECIFICATIONS AND DETAILS OF THE SUMMIT COUNTY ENGINEER (SCE). WHERE CONFLICTS OCCUR IN THE ABOVE, THE SCE SHALL DETERMINE THE GOVERNING AUTHORITY.
2. ANY DEFECTS IN THE CONSTRUCTION, INCLUDING MATERIALS OR WORKMANSHIP, SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHOD PRIOR TO ACCEPTANCE BY THE SCE.
3. THE SCE SHALL NOT BE HELD LIABLE FOR DAMAGES OF ANY TYPE WHICH MAY OCCUR AS A RESULT OF ERROR AND/OR OMISSIONS IN THE ENGINEERING DESIGN DATA PRESENTED BY THE DEVELOPER'S ENGINEER. THE SCE SHALL NOT BE LIABLE FOR ANY DAMAGES RESULTING FROM THE DEVELOPER'S CONTRACTOR NOT COMPLYING WITH THE APPROVED PLANS OR BY USING CONSTRUCTION METHODS OR MATERIALS NOT APPROVED BY THE SCE.
4. THE DEVELOPER'S ENGINEER SUBSTANTIATES THAT ALL DESIGN DATA AND CALCULATIONS PERTAINING TO THESE IMPROVEMENT PLANS, WHERE APPLICABLE, ARE CORRECT AND DO CONFORM TO THE CURRENT DESIGN CRITERIA.
5. THE SCE IN APPROVING THESE PLANS AND DEDICATION PLAT THEREOF, DOES NOT, IN ANY WAY, RELIEVE THE DEVELOPER'S ENGINEER OF HIS RESPONSIBILITY FOR ACCURATE AND COMPLETE ENGINEERING DESIGN RELATIVE TO THE PLANS.
6. ALL ROAD SURFACES, EASEMENTS OR RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT ARE TO BE RESTORED COMPLETELY TO THE BEFORE CONSTRUCTION CONDITION OR BETTER WHEN DIRECTED BY THE SCE AND/OR THE SUMMIT COUNTY D.S.S.S. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES AND SHALL BACKFILL AND GRADE EXCAVATED AREAS TO ELIMINATE PONDING ON THE SITE.
7. THE LOCATIONS OF ALL BURIED UTILITY ARE TO BE DETERMINED BY THE CONTRACTOR. EXISTING UTILITY APPURTENANCES ARE TO BE SAFEGUARDED BY THE CONTRACTOR DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE UTILITIES PROTECTION SERVICE, 1-800-362-2764, AT LEAST FORTY-EIGHT (48) HOURS BEFORE ANY UNDERGROUND WORK IS COMMENCED.
8. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE SCE PRIOR TO THE START OF ANY CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL NOT COMMENCE WITH ANY FORM OF CONSTRUCTION WITHOUT NOTIFYING THE SCE FORTY-EIGHT (48) HOURS PRIOR TO STARTING CONSTRUCTION (330-643-2850). IF ANY CHANGE IN THE WORK SCHEDULE BECOMES NECESSARY, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE INSPECTOR TO AVOID UNNECESSARY INSPECTION COSTS. IF NO NOTIFICATION IS MADE IN REGARDS TO THE CANCELLATION OF WORK, THE DEVELOPER WILL BE CHARGED FOR THE INSPECTION TIME INCURRED. THE DEVELOPER WILL BE BILLED QUARTERLY FOR INSPECTION SERVICES.
9. THE CONTRACTOR OR DEVELOPER SHALL OBTAIN ALL NECESSARY PERMITS. A ROAD OPENING PERMIT IS REQUIRED ON ALL SUBDIVISIONS BEFORE ACCESS IS GRANTED FOR CONSTRUCTION PURPOSES WITHIN A PUBLIC RIGHT-OF-WAY. THE SCE WILL NOT INSPECT OR ACCEPT ANY WORK THAT IS DONE WITHOUT A ROAD OPENING PERMIT BEING AVAILABLE ON THE CONSTRUCTION SITE. IN ADDITION, LOCAL TRAFFIC MUST BE MAINTAINED AT ALL TIMES.
10. ANY DISTURBED SIGNS, GUARDRAIL, MAIL/PAPER BOXES, DRIVES, DRIVE CULVERTS, STORM SEWER PIPES, STRUCTURES, PAVEMENTS, BERMS AND DITCHES SHALL BE REPAIRED AND/OR REPLACED AS DIRECTED BY THE SCE. ANY DISTURBED LAWN AREAS SHALL BE REPLACED BY SEEDING AND MULCHING, INCLUDING TOPSOIL WHERE NEEDED, IN ACCORDANCE WITH ODOT ITEM 653 & 659, AS DIRECTED BY THE SCE.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH SUMMIT SOIL AND WATER CONSERVATION DISTRICT AND THE SCE. EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE ANY OTHER CONSTRUCTION COMMENCES ON THIS SITE. THE CONTRACTOR SHALL, ON A DAILY BASIS, CLEAN ALL EXISTING STREETS OF MUD AND DIRT DURING THE CONSTRUCTION PHASE. THE STORMWATER POLLUTION PREVENTION PLAN MUST BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION.
12. ALL STORM SEWER INSTALLATION WITHIN THE RIGHT-OF-WAY LIMITS SHALL CONFORM TO ODOT ITEM 611.
13. WHERE SEWER INTERSECTIONS HAVE LESS THAN EIGHTEEN (18) INCH VERTICAL SEPARATION, ENCASE THE LOWER PIPE AND MONOLITHICALLY CRADLE THE UPPER PIPE IN CLASS QC1 CONCRETE FOR THE WIDTH OF THE TRENCH.
14. STORM SEWER LATERALS SHALL BE PVC (SDR 35). ALL PIPES SHALL HAVE PREFORMED WYES OF 6" DIAMETER FOR HOUSE LATERAL CONNECTIONS. ALL WYES AND LATERALS FOR DOWNSPOUT DRAINS SHALL BE INSTALLED WHEN THE STORM SEWER IS INSTALLED.
15. ALL SEWER/UTILITY TRENCH CONSTRUCTION, CONDUIT BEDDING, PIPE COVER, BACKFILL AND COMPACTION SHALL CONFORM TO THE UTILITY TRENCH DETAIL STANDARD DRAWING ON SHEET 26.
16. ALL INSPECTION AND TESTING SHALL BE DONE BY AN EXPERIENCED AND QUALIFIED FIRM ENGAGED IN THIS TYPE OF WORK. ALL STORM SEWERS/CULVERTS MUST BE FLUSHED AND HAVE A COLOR TELEVISION INSPECTION ACCOMPANIED WITH A WRITTEN REPORT SUBMITTED TO THE SCE FOR REVIEW AND APPROVAL. THE VIDEOTAPE MUST BE SUBMITTED, REVIEWED AND APPROVED PRIOR TO RELEASE OF THE PERFORMANCE BOND. IF THE STORM SEWER/CULVERT VIDEOTAPE AND WRITTEN REPORT IS NOT APPROVED, THE CONTRACTOR SHALL REPAIR OR REPLACE THE DEFECTS AND RESUBMIT THE INFORMATION. THE INTENT IS TO VIDEOTAPE PIPES NOT EASILY ACCESSIBLE FOR VISUAL INSPECTION. FOR EXAMPLE: A CULVERT UNDER A ROAD THAT CAN BE VISUALLY CHECKED IS EXEMPT FROM VIDEOTAPING. A SYSTEM OF PIPES WITH MANHOLES AND CATCH BASINS WILL BE REQUIRED TO BE VIDEOTAPED. THE SCE WILL DETERMINE IF A PIPE CAN BE VISUALLY CHECKED OR IF A VIDEOTAPE IS REQUIRED.
17. UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT ITEM 605; CONDUIT SHALL BE A MINIMUM OF FOUR (4) INCH DIAMETER PIPE AND CONFORMING TO ODOT SPECIFICATION 707.33, 707.41, 707.42 OR 707.45 WITH NO. 8 AGGREGATE ON FOUR (4) INCHES OF BEDDING. THE UNDERDRAIN SHALL BE MODIFIED WITH FOUR (4) ROWS OF PERFORATIONS. SEE UNDERDRAIN STANDARD DRAWING ON SHEET 27.
18. ALL PROPOSED STORM SEWER MANHOLES AND CATCH BASINS SHALL ADHERE TO ODOT ITEM 611 AND THE CURRENT EDITION OF THE ODOT STANDARD CONSTRUCTION DRAWINGS.
19. WHEREVER UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED THAT ARE NOT INDICATED ON THE PLANS, THE WORK SHALL BE DISCONTINUED UNTIL THE SCE APPROVES THE METHOD AND MATERIAL TO BE INCORPORATED INTO THE WORK, AS ALL CONDUITS SHALL BE INSTALLED ON A FIRM BED FOR ITS FULL LENGTH IN ACCORDANCE WITH ODOT ITEM 611 UNLESS OTHERWISE SPECIFIED.
20. ALL FILLED AREAS, EXCLUDING TRENCHES, WITHIN RIGHT-OF-WAY AREAS SHALL BE COMPACTED IN ACCORDANCE WITH ODOT ITEM 203. IN ADDITION, FOR ANY FILL IN EXCESS OF TWO (2) FEET, NUCLEAR COMPACTION TESTS SHALL BE PERFORMED BY AN APPROVED TESTING COMPANY IN ACCORDANCE WITH ODOT ITEM 203. THESE TESTS SHALL BE APPROVED BY THE SCE BEFORE ANY PAVEMENT CONSTRUCTION COMMENCES AND SHALL MEET THE COMPACTION REQUIREMENTS OF THE TRENCH DETAIL STANDARD DRAWING ON SHEET 26. EMBANKMENT CONSTRUCTION AT DETENTION/RETENTION FACILITIES SHALL BE COMPACTED IN ACCORDANCE WITH ODOT ITEM 203 AND TO A MINIMUM OF 98% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY AND MUST BE WITHIN 2% OF THE MATERIAL'S OPTIMUM MOISTURE CONTENT PRIOR TO COMPACTION.
21. BEFORE ACCEPTANCE OF THE SUB-GRADE BY THE SCE, A FORTY (40) TON PROOF ROLL SHALL BE REQUIRED ON ALL AREAS TO BE PAVED. THE SUBGRADE AND PROOF ROLL MUST BE IN ACCORDANCE WITH ODOT ITEM 204. IN LIEU OF USING THE EQUIPMENT UNDER ODOT ITEM 204, A TANDEM DUMP TRUCK WITH A GROSS WEIGHT OF 60,000 POUNDS MAY BE SUBSTITUTED.
22. FOR ODOT ITEMS 301 & 448, THE CONTRACTOR SHALL PROVIDE THE SCE WITH A JOB MIX FORMULA FOR REVIEW AND APPROVAL PRIOR TO PAVING OPERATIONS. ALL MATERIALS USED MUST BE OBTAINED FROM A SOURCE APPROVED BY ODOT. FOR ITEM 448 SURFACE COURSE, THE COARSE AGGREGATE IN THE MIX SHALL BE CRUSHED LIMESTONE. THE SURFACE COURSE SHALL BE CONSTRUCTED NO LATER THAN ONE (1) YEAR AFTER ITEM 301 IS PLACED.
23. CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT ITEM 609, CAST IN PLACE CONCRETE CURB AND GUTTER. NO ASPHALT AND/OR CONCRETE PAVEMENT AND CURB AND GUTTER SHALL BE LAID ON A FROZEN SURFACE.
24. ALL MONUMENT BOXES SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE ODOT STANDARD ROADWAY CONSTRUCTION DRAWINGS.
25. IMMEDIATELY FOLLOWING THE COMPLETION OF GRADING OPERATIONS FOR A PROPOSED DETENTION/RETENTION BASIN, FINAL RESTORATION OF THE BASIN MUST BE COMPLETED TO ESTABLISH PROPER VEGETATION AND LIMIT SOIL EROSION. A MINIMUM THICKNESS OF 3" OF TOPSOIL MUST BE APPLIED TO THE LIMITS OF THE GRADING FOR THE BASIN AND THEN SEEDED AND MULCHED. THE MATERIAL UTILIZED IN RESTORATION OF THE BASIN SHALL ADHERE TO ODOT ITEMS 652, 653 AND 659.

UTILITY NOTES

GENERAL UTILITY NOTES

1. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES IMMEDIATELY AFTER BID IS AWARDED AND ENSURE THE UTILITY COMPANIES HAVE THE ESSENTIALS REQUIRED FOR COMPLETE SERVICE INSTALLATION. CONTRACTOR SHALL NOTIFY CONSTRUCTION MANAGER AND ENGINEER OF ANY TIME FRAMES ESTABLISHED BY UTILITY COMPANIES WHICH WILL NOT MEET THE COMPLETION DATE.
2. CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, INVERT ELEVATION, AND CONDITION OF EXISTING UTILITIES WHICH ARE INTENDED TO BE UTILIZED AS A CONNECTION POINT FOR ALL PROPOSED UTILITIES, PRIOR TO ANY CONSTRUCTION. CONTRACTOR TO ENSURE EXISTING UTILITIES ARE IN GOOD CONDITION AND FREE FLOWING (IF APPLICABLE). IF ELEVATIONS, SIZE, OR LOCATION DIFFER FROM WHAT IS SHOWN, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
3. WHERE PLANS PROVIDE FOR PROPOSED WORK TO BE CONNECTED TO, OR CROSS OVER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING THE PROPOSED WORK. IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE RESULTS IN A CHANGE IN THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED WORK WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY. PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT ORIGINAL BID PRICE FOR THE PERTINENT ITEM.
4. COLOR VCR TELEVISION INSPECTION WITH AUDIO EVALUATION OF CONDITIONS AND TESTING OF ALL STORM AND SANITARY SEWERS 48" AND SMALLER PRIOR TO ANY PAVING OPERATIONS:
   - 4.1. PERFORM THOROUGH FLUSHING/CLEANING AND COLOR VCR TELEVISION INSPECTION AND TESTING OF SANITARY SEWERS AND STORM SEWERS. ALL INSPECTION AND TESTING SHALL BE DONE BY AN EXPERIENCED AND QUALIFIED FIRM ENGAGED IN THIS TYPE OF WORK, AS APPROVED BY THE COUNTY ENGINEER. WRITTEN REPORTS OF ALL INSPECTION AND TESTING SHALL BE SUBMITTED TO THE OWNER AND THE COUNTY ENGINEER FOR APPROVAL, ALL SEWERS MUST BE CLEANED AND HAVE A COLOR VCR TELEVISION INSPECTION IN ACCORDANCE WITH THE COUNTY ENGINEER SPECIFICATION AFTER COMPLETION OF THE PAVEMENT CONSTRUCTION. IF THE INSTALLATION FAILS TO MEET THE REQUIREMENT OF THESE TESTS AND INSPECTIONS, THE CONTRACTOR SHALL REPAIR OR REPLACE ALL DEFECTS AND RETEST THE INSTALLATION.
   - 4.2. ALL STORM AND SANITARY SYSTEM STRUCTURES I.E. MANHOLES, YARD DRAINS, ETC. SHALL BE PART OF THE VIDEO.
5. ALL SEWER RUN DISTANCES GIVEN ARE FROM CENTER LINE TO CENTER LINE OF MANHOLES. ALL PIPE INVERT ELEVATIONS GIVEN AT MANHOLES ARE AT CENTERLINE OF MANHOLE.
6. PLUG ALL UPSTREAM PIPE AND COVER MANHOLES AT THE END OF EACH WORKING DAY.
7. ALL DISTURBED AND/OR DAMAGED STORM SEWER PIPES, STORM SEWER APPURTENANCES, PAVEMENTS, BERMS AND DITCHES SHALL BE REPAIRED AND/OR REPLACED TO THE SATISFACTION OF THE COUNTY ENGINEER, ODOT, AND THE OWNER.
8. IT IS THE OBLIGATION AND RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY FACILITIES ARE SHOWN ON THE PLANS FROM DATA AVAILABLE AT THE TIME OF THE FIELD SURVEY IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF THE EXISTING UTILITY OWNERS AND UTILITY PROTECTION SERVICE LISTED BELOW IN ACCORDANCE WITH SECTION 153.64 OF THE O.R.C.
9. WATER MAINS, ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

STORM SEWER NOTES

1. ALL STORM SEWER PIPE GREATER THAN 15" IN DIAMETER SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) SMOOTH INTERIOR PIPE (UNLESS OTHERWISE NOTED ON PLAN). HDPE PIPE SHALL CONFORM TO ASTM D 3350 AND JOINTS PER ASTM F477. STORM SEWER EQUAL TO OR LESS THAN 15" IN DIAMETER SHALL BE PVC, SDR 35, PER ASTM D 3034 AND JOINTS PER ASTM D 3212 (OR APPROVED EQUAL).
2. WHERE SPECIFIED, RCP PIPE SHALL BE CLASS IV, PER ASTM C76, AND JOINTS PER ASTM C-443.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, BACKFILLING AND PIPE INSTALLATION, PIPE MATERIAL AND TAP CONNECTION. SEE SHEET 01 FOR THE UTILITY CONTACT INFORMATION TO COORDINATE ALL WORK.
4. ALL FIELD TILE ENCOUNTERED SHALL BE EVALUATED BY THE COUNTY ENGINEER BEFORE BEING TIED INTO THE STORM SEWER SYSTEM. ALL SUCH TIE-INS SHALL BE ROUTED TO A SEPARATE OUTLET DOWNSTREAM OF THE DETENTION CONTROLS AND BE ACCURATELY LOCATED BY THE CONTRACTOR FOR INCLUSION IN THE "AS-BUILT" DRAWINGS.
5. STORM SEWER MANHOLES COVERS SHALL BE SET ENTIRELY IN OR OUT OF SIDEWALK LIMITS. STRUCTURES ARE DEPICTED WITH A SOLID CIRCLE FOR THE GRATE WITH AN OUTLINE OF MANHOLE WALLS. ORIENT AS SHOWN ON THE PLANS.

ELECTRICAL NOTES

1. THE CONTRACTOR SHALL RETRIEVE ALL INSTALLATION REQUIREMENTS AND PROJECT DUTIES FROM THE ELECTRIC COMPANY THROUGH THEIR SERVICE DESIGN.

TELEPHONE NOTES

1. THE CONTRACTOR SHALL RETRIEVE ALL INSTALLATION REQUIREMENTS AND PROJECT DUTIES FROM THE TELEPHONE COMPANY THROUGH THEIR SERVICE DESIGN.

NATURAL GAS NOTES

1. THE CONTRACTOR SHALL RETRIEVE ALL INSTALLATION REQUIREMENTS AND PROJECT DUTIES FROM THE GAS COMPANY THROUGH THEIR SERVICE DESIGN.

CABLE NOTES

1. THE CONTRACTOR SHALL RETRIEVE ALL INSTALLATION REQUIREMENTS AND PROJECT DUTIES FROM THE CABLE COMPANY THROUGH THEIR SERVICE DESIGN.

LATERAL NOTES

1. ALL SANITARY HOUSE LATERALS SHALL BE 6" PVC LAID AT A MINIMUM 1.0% SLOPE.
2. ALL STORM HOUSE LATERALS SHALL BE 6" PVC LAID AT A MINIMUM 1.0% SLOPE.
3. ALL WATERLINE HOUSE LATERALS SHALL BE 1" TYPE K COPPER WATER LINE WITH A MINIMUM 4.5' OF COVER. A CURB STOP SHALL BE INSTALLED ON THE LATERAL 2' BEHIND THE RIGHT OF WAY LINE.

SUMMIT COUNTY D.S.S.S. NOTES

1. ALL SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH CURRENT STANDARDS AND SPECIFICATIONS OF THE DEPARTMENT OF SANITARY SEWER SERVICES (D.S.S.S.).
2. ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED. ORDINANCE 85-656, APPROVED 10/08/85
3. APPROVAL BY D.S.S.S. CONSTITUTES NEITHER EXPRESSED NOR IMPLIED WARRANTIES AS TO THE FITNESS, ACCURACY, OR SUFFICIENCY OF PLANS, DESIGNS OR SPECIFICATIONS.
4. THE DESIGN ENGINEER CERTIFIES THAT ALL UTILITIES IN EXISTING AND PROPOSED ROADS AND EASEMENTS ARE SHOWN.
5. ALL SANITARY SEWERS SHALL PASS THE AIR ACCEPTANCE TEST PRIOR TO ACCEPTANCE BY D.S.S.S.
6. ALL SANITARY SEWER SHALL BE VIDEO TAPED BY THE OWNER AND FOUND TO BE FREE OF DEFECTS AND ALL FOREIGN MATTER AND IN PROPER ALIGNMENT PRIOR TO FORMAL ACCEPTANCE BY D.S.S.S.
7. ALL MANHOLES SHALL BE SUPPLIED WITH SOLID COVERS EXCEPT IN EASEMENTS WHERE MANHOLE COVERS SHALL BE SOILD-LOCKING TYPE.
8. ALL SANITARY LATERALS SHALL BE EXTENDED TO NOT LESS THAN 15 FEET INTO THE PROPERTY.
9. ALL SANITARY LATERALS SHALL BE LAID AT NO LESS THAN 1% GRADE.
10. SANITARY SEWER MATERIALS SHALL CONFORM TO D.S.S.S. AND O.E.P.A. STANDARDS.
11. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO THE EXISTING SEWERAGE SYSTEM RESULTING FROM NON-CONFORMANCE WITH SUMMIT COUNTY STANDARDS OR GENERAL NEGLIGENCE.
12. A 12" MAXIMUM MANHOLE GRADE ADJUSTMENT IS PERMITTED. ADJUSTMENT IS TO BE MADE WITH PRECAST GRADE RINGS OR INFRA-RISER RUBBER RISER RINGS. A MINIMUM OF ONE (1) GRADE RING IS REQUIRED AT EACH MANHOLE.
13. INTERNAL CHIMNEY SEALS SHALL BE INSTALLED IN ALL MANHOLES.
14. MANHOLE COVER INSERTS SHALL BE PROVIDED FOR ALL MANHOLES, REGARDLESS OF THE TYPE OF COVER REQUIRED.
15. WHERE INLET AND OUTLET PIPES CONNECT TO MANHOLES, A FLEXIBLE WATERTIGHT JOINT, AS APPROVED BY D.S.S.S., IS REQUIRED.
16. SANITARY SEWER MATERIALS SHALL CONSIST OF P.V.C. SDR 35 MEETING A.S.T.M. D3034 WITH JOINTS CONFORMING TO ASTM D3212. *(CHECK STANDARDS FOR APPROVED MATERIAL AND ASTM SECTIONS)*
17. THE OWNER (CONTRACTOR) MUST ALERT THE OHIO UTILITIES PROTECTION SERVICE AT 1-800-362-2764 AT LEAST 48 HOURS BEFORE ANY EXCAVATION HAS BEGUN.
18. ALL ROUGH GRADING (WITHIN 6" OF FINISHED GRADE) SHALL BE COMPLETED WITHIN THE RIGHT-OF-WAY PRIOR TO SANITARY SEWER AND WATER LINE CONSTRUCTION.
19. NO SEWER CONSTRUCTION WILL BE PERMITTED UNTIL SUCH TIME THAT THE PLANS ARE APPROVED BY D.S.S.S. AND THE O.E.P.A. INCLUDING PAYMENT OF REVIEW AND "PERMIT TO INSTALL" FEES REQUIRED BY THE O.E.P.A.
20. ALL SANITARY SEWERS CONTAINED HEREIN ARE TO BE PUBLICLY OWNED AND MAINTAINED.

OEPA NOTES

1. THE SANITARY SEWERS MUST PASS A LEAKAGE TEST WHICH SHALL BE A LOW PRESSURE AIR TEST IN ACCORDANCE WITH THE TEN STATES STANDARDS SECTION 33.95 WITH A LEAKAGE LIMIT OF 100 GAL./IN./DAY.
2. ALL FLEXIBLE SANITARY SEWERS MUST PASS A DEFLECTION TEST (5% MAXIMUM).
3. ALL WATER MAIN SHALL BE INSTALLED AND PRESSURE TESTED PER AWWA C-600
4. ALL WATER MAIN SHALL BE DISINFECTED PER AWWA C-651.
5. THE WATER MAIN SHALL MAINTAIN A MINIMUM OF 35 PSI TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
6. BOOSTER PUMPS ARE NOT PERMITTED ON WATER SERVICE CONNECTIONS.
7. A MINIMUM OF 18 INCHES VERTICAL AND 10 FEET HORIZONTAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND STORM SEWERS.
8. A MINIMUM OF 18 INCHES VERTICAL AND 10 FEET HORIZONTAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND SANITARY SEWERS.
9. ALL SANITARY SEWERS SHALL HAVE RESILIENT CONNECTORS USED FOR CONNECTIONS BETWEEN REINFORCED CONCRETE MANHOLES CONFORMING TO SPECIFICATION C 478 AND PIPES, BETWEEN WASTEWATER STRUCTURES AND PIPES, AND BETWEEN PRECAST REINFORCED CONCRETE PIPE AND LATERALS PER ASTM C-923.
10. MANHOLE TESTING MUST CONFORM TO ASTM SPECIFICATION ASTM C1244.
11. SEWER LINE TESTING MUST CONFORM TO ASTM SPECIFICATION ASTM F1417.

AKRON WATER NOTES

AKRON PUBLIC UTILITIES BUREAU
WATER MAIN NOTES
11-1-2013

1. The contractor shall supply all of the water main materials, including the ductile iron pipe, fittings and fitting restraints, hydrants and valves, polyethylene encasement, all other appurtenances and any items specially itemized as required for the water main installation. All water main materials shall comply with the City of Akron, Akron Engineering Bureau, Construction and Material Specifications (Latest Edition) Item 715, Water Main Materials. Installation of all water main materials shall be in accordance with Section 250, Water Mains. Submittals of material specifications are to be made to the Utilities Engineer prior to purchasing material.
2. Must maintain a ten-foot minimum horizontal clearance from edge of all water main pipe to edge of all sanitary and storm sewer pipes and/or force main pipes.
3. Must maintain an 18-inch minimum vertical clearance from edge of all water main pipe and/or service lines to edge of all sanitary sewer and storm pipes where they cross.
4. The contractor must maintain a 12-inch minimum vertical clearance from edge of all water main pipe to edge of all direct burial conduits, concrete encased electrical conduits, light pole bases, and hand hole pull boxes.
5. The contractor must maintain a 36-inch minimum horizontal clearance from edge of all water main pipe to edge of all direct burial conduits, concrete encased electrical conduits, light pole bases, and hand hole pull boxes.
6. Where water mains cross sewer trenches, the trench is to be backfilled with approved granular material.
7. Approved pipe fittings, bolts, etc., for Akron system water main installation:

   Pipe: Class 53 ductile iron per AWWA C151 specifications, with cement-lining per AWWA C104. Labeled polyethylene encasement per AWWA C105 is required.

   Pipe Joints: Push-on joints (Tyton, Bell-Tite, etc.), per AWWA C151 specifications with plain or restraining rubber gaskets per AWWA C111 specifications.

   Fittings: Class 350 ductile iron compact fittings per AWWA C153 or full thickness castings per AWWA C110 are acceptable, with mechanical joint ends and ductile iron follower glands. Anchor pipe is required on all hydrant runs between the tee and hydrant run valve.

   Restrained pipe systems: Push-on joint with Field Lock (4 through 12-inch only) or Fast Grip gaskets (4 through 12-inch only), or mechanical joint with restrained follower glands, and 6 ounce zinc anode caps on every bolt thread. Super Lock, TR Flex or Flex-Ring required on all 16-inch or larger pipe diameters.

   Restrained fitting devices: All valves, bends, offsets, hydrant inlets, caps, plugs, and branches of tees and wyes must be restrained using mechanical joint with restrained follower glands or restraining gaskets. Hardwood blocking is required for all diameters 4 through 8-inch, concrete blocking and strapping for all diameters 12-inch and larger.

   Concrete blocking is required on all fire lines and on all diameters in areas over 100 psi. Restrained joints for diameters 12-inch and under shall be installed for a length of 30 feet on each side of a valve, bend or offset using Field-Lock or Fast-Grip restraining gaskets or mechanical joint with restrained follower glands. Restrained joints for diameters 16-inch and larger, shall be installed for a length of 30 feet on each side of a valve, bend or offset using mechanical joint with restrained follower glands.

   Mechanical Joint T-head Bolts: All mechanical joints shall be made with Cor-Ten or construction-grade alloyed ductile iron bolts. T-head bolts shall be ½-inch longer than standard length and must include a 6 oz. zinc anode cap on every bolt thread.

   Hydrants: Akron-style Mueller "Centurian" Model A423; Kennedy "Guardian" Model K-81A; EJ "FlowMaster" CD250; American Flow Control Model B62B with 6-inch inlet, American Flow Control Model B84B with 8-inch inlet. Threads shall be Akron style as shown on Akron Water Works Standard Construction Drawings F-3258 and F-3440. Hydrants must be lead-free per NSF 61-G.

   Gate Valves: Resilient-seat wedge (RSW) valves with restrained mechanical joints. Valves shall have non-rising stems and shall open to the right (clockwise).

   Butterfly Valves, 16-inch and up: Restrained mechanical joint or shouldered (not grooved) Victaulic ends with Style 44N couplings and stainless steel 316 bolts. Rubber seals in the valve must be replaceable. Flanged end or wafer-style valves are not acceptable.

   Valve Boxes: Bibby, Tyler, Bingham and Taylor or East Jordan brands are acceptable for compatibility.

   Curb Boxes: Riser pipe must be of yoloy corrosion resistant material. Plug must be cast iron and thread into a brass ring.
8. Compacted premium backfill is required for underground construction under or within three feet of any proposed or existing sidewalk or pavement. The backfilling shall conform to Section 551.09 of the City of Akron Construction and Material Specifications, Latest Edition.
9. Any existing water mains, hydrants, valves, valve boxes, meter vaults, service lines, or curb boxes that are damaged or must be adjusted and/or moved must be repaired, adjusted, moved and/or replaced at the contractor's expense. Contact Doug Zwahlen, Water Distribution Supervisor, at (330) 375-2420 to schedule this work.
10. No taps for water services shall be made until after the mainline has been tested and sterilized. All taps 2-inch and smaller shall be made by the contractor and inspected by the City of Akron. All brass fittings used shall be lead-free per NSF 61-G.
11. All water main construction shall be inspected by the City of Akron. Notify the City of Akron (Tony Puglia or Doug Zwahlen) at (330) 375-2420 at least 48 hours prior to beginning construction and for all preconstruction meetings.
12. Prior to acceptance, the water line shall be pressure tested, as specified in AWWA C600, and disinfected as specified in AWWA C651 latest revisions, by the contractor.
13. Use extreme caution when excavating in the area of existing water main pipes, valves, hydrants and thrust blocks.
14. The contractor shall supply a temporary safe water service to all homes that will have their water service interrupted by this construction.
15. The proposed facilities must maintain a minimum of 35 psi pressure delivered to the curb stop during normal operating conditions.
16. Booster pumps are not permitted on service connections.
17. Any connection to existing ductile iron water main shall be made with a ductile iron solid sleeve with restraining gland. Any connection to existing cast iron water main may be made with a cast coupling or ductile iron solid sleeve with restraining gland.

ADDITIONAL NOTE:

6. In casing pipe, all joints shall be restrained by using either Field Lock or Fast Grip restraining gaskets (4 through 12-inch only) or boltless (TR Flex) anchors. Carrier pipe shall have casing spacers with plastic runners. Sand shall be blown into the annular space. Wooden runners are not allowed.

GPD GROUP
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REV.	DATE	DESCRIPTION
	06/10/16	REVISED PER AGENCY COMMENTS
	7/11/16	REVISED PER COUNTY COMMENTS

THE PRESERVE AT MILLER'S FARM
PHASE 3
SE CORNER OF SR 18 AND MEDINA LINE RD
COPLEY, OHIO 44321

GENERAL NOTES

ISSUED FOR:	
PERMIT	04-06-2016
BID	
CONSTRUCTION	
AS-BUILT	

PROJECT MANAGER	DESIGNER
MAL	ALF

JOB NO.
2013258.03

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